

**DRAFT
STATEMENT OF FINDINGS
AND
FINDING OF NO SIGNIFICANT IMPACT
FOR
HOUSTON SHIP CHANNEL PROJECT DEFICIENCY REPORT
(Flare at the Intersection of the Houston Ship Channel and Bayport Ship Channel)
HOUSTON-GALVESTON NAVIGATION CHANNELS, TEXAS**

1. Purpose. The Houston Ship Channel (HSC) contains a deficiency inherent in the design in the *Houston-Galveston Navigation Channels, Texas, Limited Reevaluation Report and Final Supplemental Environmental Impact Statement* completed in November 1995 (1995 LRR/SEIS). The Houston-Galveston Navigation Channels, Texas, Project (HGNC) was authorized in the Water Resources Development Act of 1996 (WRDA 1996), Section 101(a)(30), P.L. 104-303. The channel design for the HGNC did not fully account for impacts of the channel improvements within the HSC in the vicinity of the Bayport Ship Channel (BSC). A hazardous and unacceptable navigation condition has resulted. Increased traffic and vessel size afforded by the channel improvements authorized by WRDA 1996 has increased the potential for collisions and accidents within this section of the HSC. The intersection of the HSC and Bayport Ship Channel (BSC) has been a major safety concern for over a decade.

The purpose of the proposed project is to correct a design deficiency and conduct a corrective action through a channel modification required to make the project function on an interim basis as initially intended in a safe, viable, and reliable manner.

All elevations in the Project Deficiency Report (PDR) are in the MLT datum unless otherwise specified. However, the Galveston District did convert the area to the Mean Lower-Low Water (MLLW) datum recently, and for all future dredging contracts the MLLW datum will be used. The MLLW datum adjustment in the project vicinity is 1.47 feet below MLT at the Texas Coastal Ocean Observation Network (TCOON) gage at Morgans Point, Texas, located roughly five miles north of the BSC. This elevation difference varies along the length of the HSC. For additional information on datum conversions reference Engineer Manual (EM) 1110-2-6056.

This Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act of 1969 (NEPA) and Council on Environmental Quality (CEQ) regulations to document findings concerning the environmental impacts of the proposed action. The location of the identified deficiency is situated along the HSC segment that crosses Galveston Bay between Redfish Reef to the south and Morgans Point to the North. Specifically, it is located northwest of the Mid Bay PA in the vicinity of the intersection between the HSC (between HSC Station 30+000 and HSC Station 23+000) and the BSC.

2. Proposed Action.

Alternative 3, the recommended deficiency corrective action, consists of increasing the existing southern radius of the Flare to 4,000 feet, widening the HSC by a maximum 235 feet to the east between about HSC Station 26+484 and HSC Station 30+090, and relocating the existing barge lanes to accommodate the widened HSC. The barge lanes will be relocated to the east of the HSC widening and consistent with the original design.

The work would be accomplished using a hydraulic dredge with cutterhead and pumping the dredged new work materials to PA 14, located in close proximity and northeast of the project. The resulting about 1.94 MCY of new work materials would be stacked along the interior slope of the existing perimeter dike to form a berm and used for future dike raising construction. In the event that PA 14 is not available at the time of construction approval of the proposed project, the new work dredged materials may be placed at the Mid Bay Upland PA.

The total maintenance quantity for the next 20 years would be approximately 4.26 MCY, which due to the incremental increase in channel depth and width beyond existing conditions. The maintenance materials would be placed in nearby HSC PAs and BU site, including existing PA 15, PA 14, Mid Bay PA, Atkinson Island BU Marsh Cells M7/8/9, and M10, as well as any other existing Atkinson Island BU Marsh Cells requiring renourishment. The future PA 15/PA 14 connection would also be utilized for maintenance. The project area would be dredged for routine maintenance at the same times and frequencies as the associated channels. Proposed project construction would begin in July 2016, and the construction period for the new work dredging and placement would be approximately 10 months.

3. Coordination. A Notice of Availability was issued to interested parties including Federal and state agencies on September 14, 2015, which described the proposed action and announced the availability of the Draft EA. Comments on the Notice of Availability and Draft EA and the District's responses, will be included in Appendix 3 of the Final EA.

4. Environmental Effects. Galveston District has taken every reasonable measure to evaluate the environmental, social and economic impacts of the proposed project. Based on information provided in the EA and coordination with Federal, state, and local agencies, temporary and permanent effects resulting from the proposed project including placement of new work and maintenance dredged material have been identified and assessed and can be found in Sections 4, 5 and 7 of the Draft EA.

- The proposed action will impact 29.9 acres of oyster reef and a conversion of approximately 26.8 acres of shallow and deep unvegetated bay bottom to deeper, navigation channel bottom. Compensatory mitigation would consist of the restoration of 30.1 acres of oyster reef at the San Leon Reef, which was impacted by Hurricane Ike induced sedimentation in 2008. Section 4.4 of the EA provides additional information regarding site selection and the USFW Habitat Suitability Index (HSI) modeling to determine the mitigation.
- The proposed action does not change the current land use.

- Project related air quality impacts were evaluated using the worst case emissions for construction of the proposed action (Appendix 4 of the Draft EA). Air contaminant emissions from construction would not be considered *de minimus*. It is anticipated that approximately 304.7 tons of NO_x and 12.4 tons of VOCs would be generated during the 2016 timeframe and 4.2 tons of NO_x and 0.6 tons of VOCs would be generated during 2017 from the construction of the proposed action. Per 40 CFR 93.158(a)(5)(i)(A), the proposed action will be coordinated with TCEQ to seek concurrence that the emissions conform to the applicable State Implementation Plan (SIP) for purposes of determining general conformity.
- No other special aquatic sites would be impacted by the proposed project. Only minor, temporary increases in turbidity, noise and navigation traffic are anticipated during project construction. These affected resources are expected to recover to pre-project conditions after the work is completed. The proposed project is expected to contribute beneficially to navigation safety and is not expected to contribute negative cumulative impacts to the area.
- Potential impacts to water quality associated with the construction of the recommended deficiency corrective action consist of sedimentation during construction. During construction, dredging of the proposed correction actions to the channel could potentially result in temporary increases in Total Suspended Solids (TSS). These impacts would be temporary in duration and minimal in extent as the proposed dredged method will employ a hydraulic dredging with a suction cutterhead, and dredged material placement would go into an existing, diked, upland confined dredged material PA. The USACE would require the construction contractor to implement sedimentation control Best Management Practices (BMPs) to minimize any detrimental effects to water quality during construction. No long-term effects to water quality are expected as a result of construction of the TSP. A Section 404(b)(1) analysis was prepared and is included in Appendix 1 of this Draft EA. The USACE would also acquire 401 Water Quality Certification from Texas Commission on Environmental Quality (TCEQ).
- No impacts to prime or unique farmlands are anticipated.
- Implementation of the proposed action is not anticipated to directly affect any historical properties, structures, objects, sites included in or eligible for inclusion in the Nation Registry of Historic Places.
- Implementation of the proposed action is not anticipated to impact aesthetic resources in the project area.
- Implementation of the proposed action would have no effect any federally threatened or endangered species or their habitat.
- Implementation of the proposed action would not disproportionately impact minority or low-income populations. Permanent adverse impacts to socioeconomic resources and environmental justice populations within the project area are not anticipated.

Thus, it is concluded that no significant impacts on the environment or to the surrounding human population are expected to occur as a result of the proposed action.

5. Determinations. The proposed corrective actions to the HSC were determined to be compliant with the following Federal legislation: NEPA, Endangered Species Act, Clean Water Act, Fish and Wildlife Coordination Act, Magnuson-Stevens Fishery Conservation and

Management Act (MSFCMA) as amended through 2006, Marine Mammal Protection Act (MMPA) of 1972 as amended through 2007, National Historic Preservation Act, Coastal Zone Management Act, Clean Air Act, Executive Order 11990 (Protection of Wetlands), Executive Order 11988 (Floodplain Management), CEQ (Memorandum; Prime or Unique Farmlands), Executive Order 12898 (Environmental Justice), Executive Order 13045 (Protection of Children from Environmental Health Risks and Safety Risks), Resource Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Waste Amendments (HSWA) of 1984, Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 as amended by the Superfund Amendments and Reauthorization Act of 1986, Executive Order 13112 (Invasive Species), Migratory Bird Treaty Act (MBTA), the U.S. Army, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the U.S. Department of Agriculture 2002 Memorandum of Agreement with the Federal Aviation Administration (FAA) to Address Aircraft-Wildlife Strikes, Protection of Environment, Executive Order 11514, and Executive Order 13186 (Migratory Bird Habitat Protection).

6. Findings. Based on my analysis of the Draft EA for the HSC Project Design Deficiency Report and other information pertaining to the proposed project, I find that the BSC Project will not have a significant effect on the quality of the human environment. Galveston District reviewed the project for consistency with the goals and policies of the TCMP. Based on this analysis, I find that the proposed plan is consistent with the goals and policies of the TCMP. After consideration of the information presented in the Draft EA, I have determined that an environmental impact statement is not required under the provisions of NEPA, Section 102, and other applicable regulations of the USACE, and that the proposed action may be constructed.

(date)

Richard Pannell
Colonel, U.S. Army Corps of Engineers,
District Engineer